Please amend the application filed on even date herewith prior to proceeding with its examination.

IN THE CLAIMS

1. (Original) An isolated nucleic acid molecule comprising a nucleotide sequence encoding a mannose-specific adhesin, whereby the nucleotide sequence is selected from the group consisting of:

(a) nucleotide sequences encoding a polypeptide comprising an amino acid sequence that has at least 60 % sequence identity with the amino acid sequence of SEQ ID NO. 1;

(b) nucleotide sequences comprising a nucleotide sequence that has at least 60% sequence identity with the nucleotide sequence of SEQ ID NO. 2;

(c) nucleotide sequences the complementary strand of which hybridises to a nucleic acid molecule sequence of (a) or (b);

(d) nucleotide sequences the sequence of which differs from the sequence of a nucleic acid molecule of (c) due to the degeneracy of the genetic code.

2. (Currently Amended) The [An] isolated nucleic acid molecule according to claim 1, wherein the nucleotide sequence encodes a variant or fragment of the mannose-specific adhesin and whereby the variant or fragment is capable of binding mannose.

3. (Currently Amended) A vector comprising a nucleic acid molecule according to claim 1 [or 2].

4. (Currently Amended) The [A] vector according to claim 3, wherein the nucleic acid molecule is operatively linked to at least one regulatory DNA element allowing the expression of said nucleic acid in a prokaryotic or a eukaryotic cell.

5. (Currently Amended) The [A] host cell comprising [nucleic acid molecule as defined in claim 1 or 2, or] a vector as defined in claim [3 or] 4.

6. (Currently Amended) The [A] host cell according to claim 5, whereby the host cell is a Gram-positive bacterium.

7. (Currently Amended) The [A] host cell according to claim 6, whereby the host cell belongs to a genus selected from the group consisting of *Lactobacillus*, *Lactococcus, Leuconostoc, Carnobacterium, Bifidobacterium, Pediococcus*, *Bacillus, Streptococcus*.

8. (Currently Amended) The [A] host cell according to claim 5 [any one of claims 5 – 7], whereby the nucleic acid molecule confers to the host cell the ability to adhere to human cells.

9. (Currently Amended) A composition comprising a host cell as defined in claim 5 [claims 5 or 6] and a pharmaceutically or physiologically acceptable carrier.

10. (Original) An isolated polypeptide having an amino acid sequence that has at least 60 % sequence identity with the amino acid sequence of SEQ ID NO. 1.

11. (Original) A polypeptide which is a fragment or a variant of the polypeptide of claim 10, whereby the fragment or variant is capable of binding mannose.

12. (Currently Amended) A composition comprising a polypeptide as defined in claim 10 [claims 10 or 11] and a pharmaceutically or physiologically acceptable carrier.

13. (Currently Amended) A method for producing a polypeptide [as defined in claims 10 or 11], the method comprising the steps of:

a) providing a host cell comprising a nucleotide sequences operably linked to a DNA regulatory element, whereby said nucleotide sequence encodes an amino acid sequence that has at least 60 % sequence identity with the amino acid sequence of SEQ ID NO. 1,

[a)] b) culturing a said host cell [as defined in any one of claims 5 – 8] under conditions conducive to the expression of the polypeptide and,

[b)] c) recovery of the polypeptide.

14. (Currently Amended) A method for producing [the] a composition [of claim 12], the method comprising the steps of:

a) providing a host cell comprising a nucleotide sequences operably linked to a DNA regulatory element, whereby said nucleotide sequence encodes an amino acid sequence that has at least 60 % sequence identity with the amino acid sequence of SEQ ID NO. 1,

b) culturing said host cell under conditions conducive to the expression of a polypeptide,

c) recovery of the polypeptide, and [claim 13 and further comprising the step of]

d) mixing the polypeptide with a pharmaceutically or physiologically acceptable carrier.

15. (Currently Amended) A method for producing a composition [of claim 9], the method comprising the steps of:

a) providing a host cell comprising a nucleotide sequence operably linked to a DNA regulatory element, whereby said nucleotide sequence encodes an amino acid sequence that has at least 60 % sequence identity with the amino acid sequence of SEQ ID NO. 1,

[a)] b) culturing a said host cell [as defined in any one of claims 5 – 8]; and,

[b)] c) mixing the host cell with a pharmaceutically or physiologically acceptable carrier.

16. (Currently Amended) A method for treating or preventing a bacterial infection of the gastrointestinal tract, the urinary tract, or the vagina comprising administering to a patient in need of such treatment an effective amount of a composition as defined in claims 9 [or 12].

17. (Currently Amended) [A] The method according to claim 16 whereby by the bacterial infection is caused by a bacterium which expresses type 1 fimbriae.

18. (Currently Amended) [Use of a host cell as defined in any one of claims 5 – 8, or a polypeptide as defined in claims 10 or 11] The composition according to claim 9, whereby

said composition is [for the manufacture of] a medicament for the treatment or prevention of a bacterial infection of the gastrointestinal tract, the urinary tract, or the vagina.

19. (Currently amended) [A use] The composition according to claim 18, [by] whereby the bacterial infection is caused by a bacterium which expresses type 1 fimbriae.

20. (Original) A method for determining whether a bacterium has the ability to bind mannose, whereby the method comprises determining the presence or absence of a nucleotide sequence as defined in claim 1 and whereby the presence of the nucleotide sequence is indicative of the ability to bind mannose.

21. (New) A method for treating or preventing a bacterial infection of the gastrointestinal tract, the urinary tract, or the vagina comprising administering to a patient in need of such treatment an effective amount of a composition as defined in claim 12.

22. (New) The method according to claim 21 whereby by the bacterial infection is caused by a bacterium which expresses type 1 fimbriae.

23. (New) The composition according to claim 12, whereby said composition is a medicament for the treatment or prevention of a bacterial infection of the gastrointestinal tract, the urinary tract, or the vagina.

24. (New) The composition according to claim 23 whereby the bacterial infection is caused by a bacterium which expresses type 1 fimbriae.